

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Martin, et al.

Confirmation No.: To Be Assigned

Group Art Unit: 1763

Serial No.: To Be Assigned

Examiner: Hassanzadeh, Parvis

Filed: Even Date Herewith

Docket No.: 62002-1752

For: Method and Apparatus for Low energy Electron Enhanced Etching of Substrates in an AC or DC Plasma Environment

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Sir:

This information disclosure statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, and specifically:

- ☒ under 37 CFR 1.97(b), or
(within Three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement Under 37 C.F.R. 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97(b) time period, but before the final office action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with a:
☐ Statement under 37 CFR 1.97(e), and
☐ a \$180.00 petition fee set forth in 37 CFR 1.17(p).
(Filed after final office action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Enclosed is a check in the amount of \$

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Please charge \$0.00 to deposit account 20-0778. At any time during the pendency of this application, please charge any fees required to Deposit Account 20-0778 pursuant to 37 CFR 1.25. The Commissioner is hereby requested to credit any overpayment to Deposit Account No. 20-0778.

- ☒ Applicant(s) submit herewith *Form PTO 1449A - Information Disclosure Statement by Applicant* together with copies (where required) of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may or may not be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56. As required by 37 C.F.R. §1.98(a), a legible copy of each document is provided.

- ☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on the form PTO 1449 and is enclosed herewith.

The following rights are reserved by the Applicant(s): the right to establish the patentability of the claimed invention over any of the listed documents should they be applied as reference, and/or the right to prove that some of these documents may not be prior art, and/or the right to prove that some of these documents may not be enabling for the teachings they purport to offer.

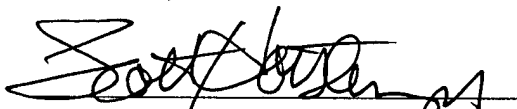
This statement should not be construed as a representation that an exhaustive search has been made, or that information more material to the examination of the present application does not exist. Any statements or identifications regarding the relevance of any portion(s) of cited references should not be construed as a representation that the most relevant portion(s) have been identified, and the absence of such statements or identifications should not be construed as representations that there are no relevant portion(s). The Examiner is specifically requested not to rely solely on the materials submitted herewith. The Examiner is requested to conduct an independent and thorough review of the documents, and to form independent opinions as to their significance.

It is requested that the information disclosed herein be made of record in this application and that the Examiner initial and return a copy of the enclosed PTO-1449 to indicate the documents have been considered.

Respectfully Submitted,

THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.

By:


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EXPRESS MAIL

I hereby certify that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" in an envelope addressed to: Commissioner for Patent, Mail Stop Patent Application, P.O. Box 1450, Alexandria, VA, on

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| Form PTO-1449 | | | | | Attorney Docket No. 062002-1752 | | Serial No. To Be Assigned | |
|--|------|---|-----------|-----------------|---|----------|-------------------------------------|----|
| INFORMATION DISCLOSURE CITATION | | | | | Applicant Martin, et al. | | | |
| <i>(Use several sheets if necessary)</i> | | | | | Filing Date Even Date Herewith | | Group 1763 | |
| U.S. PATENT DOCUMENTS | | | | | | | | |
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| | 1M | | | | | | | |
| | 1N | | | | | | | |
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| | 1O | P. Breisacher et al. "Comparative Stabilities of Gaseous Alane, Gallane and Indane" Journal of the American Chemical Society pp. 4255-4258 87:19 Oct 5, 1965. | | | | | | |
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| | 1Q | E. Wiberg et al "Hydrides of the Elements of Main Groups I-IV" New York 1971 Chapter 6 pp. 443-460. | | | | | | |
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| <p>* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.</p> | | | | | | | | |
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Attorney Docket No.

062002-1752

Serial No.

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INFORMATION DISCLOSURE CITATION*(Use several sheets if necessary)*Applicant
Martin, et al.Filing Date
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| | | | | | | | Yes | No |
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| | 2R | J.R. Creighton "Hydrogen Chemisorption and Reaction on GaAs(100)." J. Vac. Sci. Technol. A 8 (6) Nov/Dec 1990 pp. 3984-3987. |
| | 2S | H.P. Gillis et al "Low-Energy Electron Beam Enhanced Etching of Si(100)-(2x1) by Molecular Hydrogen" J. Vac. Sci. Technol B. vol. 10 No. 6. Nov/Dec 1992. |
| | 2T | H. Watanabe et al "Electron-beam-assisted Dry Etching for GaAs using Electron Cyclotron Resonance Plasma Electron Source" Appl Phys. Lett 61 (25) Dec 21, 1992 pp. 3011-3013. |

* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

EXAMINER'S SIGNATURE:

DATE CONSIDERED:

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| | 3M | | | | | | | |
| | 3N | | | | | | | |
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| | | Document Number | Date | Country | Class | Subclass | Translation |
| | | | | | | | Yes No |
| | 4K | | | | | | |
| | 4L | | | | | | |

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| | 4M | H.P. Gillis et al "Highly Anisotropic, Ultra-smooth Patterning of GaN/SiC by Low Energy Electron Enhanced Etching in DC Plasma" J. Electronic Mat 26, 301-305 (1997) pp 1-16. |
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| | 4O | |

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